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A REVISION OF THE LIZARDS OF THE GENUS CYCLURA.

By THOMAS BARBOUR and G. K. NOBLE.

WITH FIFTEEN PLATES.

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No. 4.— *A Revision of the Lizards of the Genus Cyclura.*

BY THOMAS BARBOUR AND G. K. NOBLE.

INTRODUCTION.

SOME years ago while working upon West Indian reptiles the senior author became interested in *Cyclura*. Every opportunity has been grasped which offered the slightest probability of securing specimens, so that now the Museum of Comparative Zoölogy contains more species of that genus than any other museum. That the series is by no means large, will appear at once. The preparing of this revision would have been difficult but for the friendly interest of Mr. H. W. Fowler of the Academy of Natural Sciences of Philadelphia; the unique type of our *C. nuchalis* is in the Museum of the Academy. We take great pleasure in dedicating *C. stejnegeri* from Mona Island to Dr. Stejneger, through whose kindness a paratype from the small series in the U. S. N. M. has been retained for the M. C. Z. From the Carnegie Museum in Pittsburgh we have specimens of *C. rileyi* and of *C. macleayi*, from the Isle of Pines, presented in return for the identification, by the senior author, of the Carnegie Museum series of West Indian reptiles. These he was allowed to study through the kindness of Prof. L. E. Griffin. A number of Rhinoceros Iguanas have been received from time to time at the New York Zoölogical Park, have died and probably most of them have found a resting place in the American Museum in New York. These cannot now be found; one of the examples, however, now mounted in the Museum of Comparative Zoölogy, a gift of the N. Y. Zoölogical Society, was said to be from Navassa Island and seems to represent the species confined to that island. In general, zoölogical park specimens, while very valuable for anatomical study, are often without locality, although this is sometimes supplied from the fertile imagination of an animal dealer. The fine series of examples of *C. carinata* in the New York Zoölogical Park, was, however, a conspicuous exception, since they were known to have come from Turks Island. Unfortunately this entire, valuable series seems to have been lost sight of, and a careful search at the American Museum of Natural History failed to reveal a single one.

GENERAL CONSIDERATIONS.

The members of the genus *Cyclura* form a small compact group of species confined to the Greater Antillean district of the West Indian region. Related to the Rock Iguanas (*Ctenosaura*) of the Central American mainland they are nevertheless well set off from the latter by the possession of the peculiar corneous combs or pectinations on the hind toes. Except for this character common to all the West Indian forms, some of these would appear more closely related to some race of *Ctenosaura* than to another of the island species. On the whole, it does not seem advisable to recognize the genus *Metapoceras* for the so-called Rhinoceros Iguanas of Navassa, Haiti, and Mona, since they are obviously but slightly advanced modifications of such a type as the Jamaican Iguana, which is a true, and probably ancestral, *Cyclura* in every respect. The species in the Cayman Islands is nearly related to the Cuban, and the number of forms known from the Bahamas represent two groups of species, one showing affinities with the Cuban, *Cyclura macleayi*. In the Bahamas, *baeolopha* of Andros Island seems most like *macleayi*, with its neighbor, *inornata*, hardly less similar; while *nuchalis* of Fortune, *rileyi* of Watlings, and *carinata* from Turks Island form another well differentiated group of races. The latter species has head-scales of a simple and scarcely modified, one might, at first sight, say obviously primitive nature. We imagine, however, that this condition has been reached secondarily, the transition back through some of the other species being clearly traceable. So that while the scales of the head of *carinata* are of a very simple and undifferentiated character, it is nevertheless extremely improbable, especially in view of its habitat, that the species can be considered ancestral or anything more than a reversion to the probably, or possibly, primitive condition for *Cyclura*, and *Ctenosaura*, or their progenitors. It does not seem wise to lay much stress upon the distribution of the species of *Cyclura* as a basis for any zoögraphic deduction or surmise. We know but little of the habits of the species, the whole group is fast disappearing and will soon be wholly extinct, and even now we are able to characterize but eleven species, probably a comparatively small part of those in existence even two hundred years ago.

Early writers often mention Iguanas in the West Indies, and of these some referred to the genus *Iguana* and some to *Cyclura*; among the latter was Catesby. This authority writing upon the Natural

History of Carolina and the Bahamas, states in 1743, that Iguanas or Guanas were abundant upon many islands throughout the Bahamas, so common in fact that schooners were cargoed with them and that they were carried to Carolina for food. The name Guana is even now used among the "Conchs" of the Bahamas, who still speak a peculiar archaic English. A vague idea of how wide-spread these great lizards were in early colonial times may be gained from the Bahaman place-names. Thus, there is a Great Guana Cay, off the Abaco coast not far from Green Turtle Cay, a settlement which once had some importance. This islet was visited by the senior author in 1904 but no Guanas were found, and none had persisted to within the memory of the elder folk living in the tiny hamlet. There is also a Guana Cay near Little Harbor about half way up the chain of the Berry Islands, and not far from one of the Bahaman Whale Cays, for this also is a common place-name. Then we find another Great Guana Cay in the Exuma chain of Cays. In all of these islands Guanas are now unknown. On Bitter Guana Cay, however, but a few hundred yards from the Great Guana Cay in Exuma, Mr. C. J. Maynard tells us that up to 1915 a few *Cycluras* were still to be found. He believes that these represent an undescribed race. As to the status of the other Bahaman species:—*baeolopha* is still not uncommon, since its habitat, Andros Island, is very large and contains much unsettled and indeed even unexplored territory. Of *nuchalis* from Fortune Island we know nothing. Stejneger's species, *rileyi*, is confined to two tiny islets in the saline lagoon of Watling's Island; here Riley obtained the types in 1903 and W. W. Worthington procured a few specimens in March, 1909. Our new species, *inornata*, is, or was, found upon a little island called U Cay, in Allen's Harbor, north of Highborn Cay and situated in the Archipelago between Exuma and New Providence. Here in 1892 Maynard found the Iguanas not uncommon. He revisited the islet in 1915, was storm bound there and hence had ample opportunity to cover it very completely. He found but two Iguanas still living upon U Cay. Both of these he shot; one, our type, he secured, the other escaped, wounded. Thus the species *inornata*, which once doubtless existed on several islands about Allen's Harbor, is now beyond doubt extinct. Since these creatures are excellent for food, they are constantly hunted by the native negroes, often with dogs trained for the purpose. These negroes during the course of their sponging and turtling voyages cover the entire Bahaman Archipelago, visiting even the most remote, inaccessible, and infertile cays. There is a constant search for animal food, which unfortunately is by no

means abundant or easily obtained by the poor inhabitants of one of Great Britain's most delightful but poverty-stricken colonies. Iguanas are often brought from Andros to market in Nassau, upon New Providence Island. One of the authors has seen the creatures for sale there upon several occasions. We have concluded therefore that a magnificent adult male *baecolopha* in the Academy of Natural Sciences of Philadelphia (Reptile Coll. 8120) probably represents such a specimen, although it is said to have been collected by a Mr. Wilson on New Providence in 1861. Our belief is that the Iguanas disappeared from New Providence long before this date. For the benefit of the herpetologists we should also record that Salt Cay, near Hog Island, opposite the town of Nassau, has been stocked with Iguanas brought from Andros Island. Mr. Chamberlain, the owner of Salt Cay is reported to have stated that they have thriven and appear to have become well established in their new home.

Of some of the other species of the genus we know even less than of these we have referred to. *Cyclura collei* has almost certainly completely disappeared upon the mainland of Jamaica and it was only by the greatest stroke of good fortune that Mr. Arthur Perrin of Cambridge who kindly volunteered to make a special excursion for the purpose, was able to secure the specimen, which we describe, from Goat Island not far from Old Harbor off southern Jamaica. Dr. A. G. Mayer tells us that an Iguana was secured a few years ago on one of the cays near Montego Bay, and that he believes a few still exist there. Of the species on Navassa, Haiti, and Mona we know practically nothing. Mr. W. M. Mann who spent some months in Haiti, and who made an excellent collection of reptiles there in 1913 was unable to learn anything of Iguanas and secured none. Mr. Halter from the American Museum, visited Santo Domingo in 1915 and could learn nothing of existing Iguanas. Of the *Cyclura* on Mona Island we know only that Stejneger quotes Bowditch as saying that he got his specimens in 1901, among the rocks.

The journeys which the senior author has made on a number of occasions permit us to speak with more authority regarding Cuba. Gundlach in 1880 wrote "Esta especie vive en varios cayos y en las costas de la isla de Cuba y de la isla de Pinos; pero es hoy una especie rara, aunque antiguamente fuese comun y llevada a los mercados, siendo su carne estimada como excelente manjar." He goes on to say that it usually lives in burrows in the sand dunes or in sandy places about the coasts where it is easily dug out. Now the Cuban Iguana has with increasing civilization become still more rare and restricted

in range. C. T. Ramsden, the accomplished naturalist of Guantánamo has found a few specimens on the coast cliffs of the extreme eastern end of the island. Wirt Robinson sent one to the M. C. Z. from Santiago in December, 1903. The only very young *Cyclura* we have seen was one loaned by Ramsden, and obtained by Oskar Tollin during a trip to Belig, near Cabo Cruz, in the summer of 1914. The species is still abundant on the Cayos near Manzanillo and those off the south coast near Santa Cruz del Sur. It is fairly abundant on the Isle of Pines. In 1915 while Prof. de la Torre and his assistant Sr. V. J. Rodríguez were collecting with W. S. Brooks and T. Barbour in the region of Guane, we learned that Iguanas were still not uncommon in the limestone mountains which encircle the glorious valley of Luis Lazo. Here we got two fine adult specimens, one for the Museo Poey in Havana and one for the M. C. Z. Prof. de la Torre says that Iguanas are also fairly common on the Pan de Guajaibon and he writes us that he has recently seen one near Baracoa. They persist as well on many of the small and remote cayos of the north coast. Curiously enough in spite of what Gundlach says — no one appears to eat Iguanas in Cuba at the present time. Ramsden has also observed this and writes me that he has been told that Cubans believe the Iguana to be very poisonous. When hung up by the tail, they say, a bába or burujo, as they call it, black drivel or vomit, runs from its mouth. This is supposed to be deadly. The black vomit due to blood in the stomach, which marks the final stage of a fatal case of yellow fever, is also called in Cuba burujo, a name also used for the grounds of coffee, and it may be that some imagined similarity between these burujos, coupled with forgetfulness which increased as Iguanas grew rare, has now spread the idea that Iguanas are unfit for food, when once, in Cuba as elsewhere, they were eagerly sought after.

It will be noticed that some old, long standing specific names have been dropped. The reason for this is as follows:— the name *nubila* was based upon a young specimen without locality. The description given by Gray is worthless. The type is mentioned in Boulenger's Catalogue and hence doubtless is still in existence. When it is examined it will probably be possible to determine whether the name supercedes one used here or whether it represents another distinct species. It is impossible to determine this. Cope attached the name *nubila* to a specimen which he said was from Cat Island and was U. S. N. M. 14576; but Stejneger tells us that this number is borne by a specimen of *Leiocephalus* and that there is now no Cat Island Iguana in the U. S. N. M. and no evidence that there ever was one. Cuvier

first used *cyclura* as a specific name for what he called L'Iguane de la Caroline. After what Catesby said we imagine that he had a Bahaman specimen which had been carried to Carolina and had probably been sent to Paris from there. Which Bahaman species he had it is impossible to decide from his meagre descriptions. So unless the type is still in existence and sufficiently well preserved, which is improbable, it will not be possible to more than surmise that Cuvier probably had a specimen of *C. baerolopha*. Stejneger and Barbour have both used the name *Cyclura cyclura* Cuv. for the Cuban Iguana and this might be considered as restricting the name. It is probably better to drop the name altogether until someone studies this old type, and also the type of *nubila* in the British Museum.

KEY TO THE SPECIES.

- a*¹ Median frontal shield enlarged and tubercular.
 - b*¹ Nasals broadly in contact with the rostral. *stejnegeri*.
 - b*² Nasals separated from the rostral by small scales, or granules.
 - c*¹ Posterior prefrontals separated from the frontal shield by two rows of scales. *nigerrima*.
 - c*² Posterior prefrontals separated from the frontal shield by a single row of narrow scales. *cornuta*.
- a*² Median frontal shield very slightly enlarged, not tubercular.
 - b*¹ Nuchal section of dorsal crest formed of spines much longer than those of the back section.
 - c*¹ Prefrontal and frontal scales small and irregular. *carinata*.
 - c*² Prefrontal and frontal scales enlarged and definitely arranged.
 - d*¹ Nuchal section of dorsal crest formed of 14 spines, some twice as wide as the others. *nuchalis*.
 - d*² Nuchal section of dorsal crest formed of 20 spines, all of about the same width. *rileyi*.
 - b*² Nuchal section of dorsal crest formed of spines not distinctly larger than those of the back section
 - c*¹ Scales covering the upper surface of the head flat, depressed, the interstices forming a network; dorsal crest continuous on the shoulders. *collei*.
 - c*² Scales covering the upper surface of the head, especially the snout, swollen; dorsal crest interrupted on the shoulders.
 - d*¹ Infralabials separated from the molar scales by a single discontinuous row of scales; canthal scale very much larger than the precanthal.
 - e*¹ A single, large, flat median frontal; gular region the same color as ventral surface. *baerolopha*.

- e*² Two large flat median frontals; gular region white in strong contrast to rest of ventral surface. *inornata*.
- d*² Infralabials separated from the malar scales by several rows of small scales; canthal scale about the same size as the precanthal.
- e*¹ Enlarged frontal shield separated from the posterior prefrontals by two rows of scales; 37 spines in the back section of dorsal crest. *macleayi*.
- e*² Enlarged frontal shield separated from the posterior prefrontals by five rows of small scales; 44 spines in the back section of dorsal crest. *caymanensis*.

DISCUSSION OF THE SPECIES.

CYCLURA MACLEAYI Gray.

Plate 1, 2; Plate 13, fig. 5, 6.

Gray Cat. lizards, British mus., 1845, p. 190.

Diagnosis:—Nasals broadly in contact with the rostral. Pre-frontal region covered by a pair of elongate supranasals, immediately followed by two pair of large prefrontals, the posterior pair several times as large as the anterior pair; both pairs of prefrontals broadly in contact on the median line of the snout, all these scutes covering the snout slightly swollen and convex. Frontal region between prefrontals and the scarcely indicated supraocular semicircles covered by two irregular rows of scales, the anterior row formed of scales several times as large as those in the posterior one, immediately following the posterior row a large rounded median scale. Supraorbital semicircles scarcely differentiated from the supraocular disc, separated by two, partly by three, rows of scales. Occipital region covered with enlarged and swollen scales, about two rows of scales between the occipital and the semicircles. Canthus rostralis consisting of three large scales, the posterior one elongate and in contact with two supra-ciliaries which are also elongate,—all these scales on the top of the head swollen, slightly keeled, and, with the exception of the small supraocular scales, uniformly enlarged. Dorsal crest low, the largest spine scarcely over a centimeter high, interrupted on the shoulders and rump, 37 spines between these two points. Color above, brown-

ish gray sprinkled with pale, yellowish green, the spots very abundant and partly confluent posteriorly; flanks marked by four broad, vertical stripes of pale bluish gray, each stripe edged with dark slaty gray; sides and upper surface of the head broadly blotched with pale, bluish yellow.

Habitat:—Cuba, the Isle of Pines, and the neighboring Cays.

Description:—Adult male, M. C. Z., 11050 from the Valley of Luis Lazo, western Cuba, April 1915, C. de la Torre and T. Barbour.

Rostral as wide as the mental, broadly in contact with nasals; nasal large, somewhat pentagonal, perforated by a large, ovoid nostril; each nasal in contact with a large, elongate supranasal and a squarish postnasal; nasals and supranasals broadly in contact in the middle of the snout; the pair of supranasals immediately followed by two pair of large prefrontals, the posterior pair several times as large as the anterior pair, both pairs of prefrontals broadly in contact in the middle line of the snout; a few granules on the crossing point of the two prefrontal sutures; all these scutes covering the upper surface of the snout slightly swollen and convex; between prefrontals and the scarcely indicated supraocular semicircular two irregular rows of scales, the anterior row formed of scales several times as large as those in the posterior one; immediately following the posterior row a large rounded median scale; supraorbital semicircle differentiated from the supraocular disc but the scales on the outer and anterior portion of the supraocular region smaller than the others; semicircles separated by two, partly by three, rows of large scales; occipital located with its posterior end on a line with the posterior end of the semicircles; scales of the occipital region enlarged and swollen, the outer ones largest; about two rows of scales between the occipital and the semicircles; two or three rows of superciliary shields not clearly differentiated; canthus rostralis consisting of three large scales, the first elongate and in contact with two superciliary scales that are also elongate; all of these scales on the top of the head swollen, slightly keeled, and, with the exception of the small supraocular scales, uniformly enlarged; a well-developed series of strongly keeled suboculars continued backward as a supratympanic series; six supralabials to the middle of the eye; a series of three or four rows of small scales separating the supralabials from the suboculars; above the angle of the mouth and in front of the lower edge of the ear a large tubercular shield; above it about the middle of the front edge of the ear two large shields, preceded by a third, all three tubercular; below the angle of the mouth a few tubercular scales, irregularly

arranged; five infralabials to the middle of the eye; a single row of very large, keeled malar scales, and two anterior ones in contact with the infralabials, the rest separated from the infralabials by one or two rows of small scales; dorsal and ventral scales small, about eleven contained in the vertical diameter of the tympanum; from the nuchal fold along the median line of the neck and back a row of low, blunt spines, the largest slightly over a centimeter high; this crest interrupted on the shoulders and rump, thirty-seven spines between these two points; upper surface of limbs with slightly imbricated, keeled, posteriorly pointed scales considerably larger than the body-scales; scales covering the upper surface of the fore arm and tibia much larger than those covering the upper arm and femur; on the upper arm about eight, on the lower about five of these scales to the vertical diameter of the tympanum; a single series of twenty-two femoral pores; inner side of second toe with one comb, of third toe with two combs, each consisting of three lobes; tail compressed, covered with obliquely keeled scales in vertical rows, forming faintly indicated verticils; tail surmounted by a serrated crest similar to the body-crest but formed of slightly larger spines.

Coloration:—Ground tone of dorsal surface brownish gray; whole dorsal surface sprinkled with pale, yellowish green, the spots very abundant and partly confluent posteriorly; flanks marked by four broad, vertical stripes of pale bluish gray; each stripe edged dark slaty gray, sides and upper surface of the head broadly blotched with pale bluish yellow; sides of the tail with a series of irregular vertical stripes of bluish gray becoming regular and evenly spaced posteriorly, ventral surface somewhat lighter than the upper surface.

Variation and remarks:—A very young specimen, a female measuring only 115 millimeters from snout to vent, collected at Belig, Cabo Cruz, Cuba, by O. Tollin and now in the collection of C. T. Ramsden varies greatly in color from the adult, but the lepidosis of the specimen is very similar to that of the adult. In this example the ground tone of the dorsal surface is grayish blue tinged with greenish; along the middle line of the back there is a series of broad white crossbars edged broadly before and behind with black; these black and white crossbars are continued on the sides as a series of wavy stripes, each stripe pointing obliquely backward; the ventral surface is paler than the dorsal, and is covered by broken continuations of the lateral stripes.

Material examined.

M.C.Z.	No. of Specimens	Age	Sex	Locality	Date	Collector	Remarks
11050	1	Adult	male	Valley of Luis Lazo, Cuba	1915	C. de la Torre and T. Barbour	Described
8456	1	hf. grown	male	Guantanamo	1913	C. T. Ramsden	
6915	1	adult	male	Santiago de Cuba	1903	Wirt Robinson	
10966	} 2	adult and	} males	Los Indios		G. A. Link	
10967		juv.		Isle of Pines			

CYCLURA CAYMANENSIS, sp. nov.

Plate 3.

Type, an alcoholic skin, M. C. Z., 10534, Cayman Islands, probably from Cayman Brac, 1911, W. W. Brown, Jr.

This species is so closely related to *C. macleayi* from Cuba that a detailed description is superfluous. The distinguishing characters of the species are adequately presented in the following diagnosis.

Diagnosis.—Scales covering the upper surface of the snout somewhat similar to those of *C. macleayi*; enlarged frontal shield separated from the prefrontals by five irregular rows of small scales instead of two rows of large ones as in *C. macleayi*. Scales of the frontoparietal region much smaller and more numerous than those of *C. macleayi*. Supraorbital semicircles not differentiated from the frontoparietal scales. Canthus rostralis consisting of three short, rather oblong scales, all about the same size. Dorsal crest not interrupted on either shoulders or rump, not reduced at all on the shoulders, considerably reduced on the rump; forty-four scales in the dorsal crest from shoulders to rump, all spines of this section very low, scarcely over 2 mm. high; spines of the neck and tail-crest about twice as high as these on an average. Limiting row of each verticil formed of scales several times as large as the other verticil scales, the row preceding the limiting row somewhat wider than the other rows. Coloration like *C. macleayi* but very much paler and grayer; an indication of regular pale yellow blotches along the median line of the back; no stripes or markings on the sides.

Habitat.—Cayman Brac and Little Cayman.

Remarks.—Garman (Bull. Essex inst., 1888, 20, p. 105; author's

separate p. 5) quotes Maynard to the effect that "The Iguana occurs commonly in the cliffs of both this island and Little Cayman." He was discussing the island of Cayman Brac. During the autumn of 1915 this island was visited by the most terrific hurricane of historic times. The whole terrestrial fauna of the island is said to have suffered very seriously.

Material examined.

We have only seen a single specimen of this species, the type.

CYCLURA BAEOLOPHA Cope.

Plate 4, 5, 6; Plate 13, fig. 1, 2.

Cope, Proc. Acad. nat. sci. Phil., 1887, p. 123. Barbour, Mem. M. C. Z., 1914, 44, p. 298.

Diagnosis:—Nasals broadly in contact with the rostral. Pre-frontal region covered by a pair of rectangular supranasals broadly in contact in the middle line of the snout; each supranasal in contact with a pair of narrow prefrontals which are followed by a very large posterior prefrontal; the anterior and posterior prefrontals form a median suture continuous with the nasal and supranasal suture,—all of these scutes covering the upper surface of the snout strongly convex, even tubercular. Frontal region between the prefrontals and the supraorbital semicircles covered by several rows of large irregular scales; the row in contact with the prefrontals consisting of very large scales, the largest being about a third as large as the posterior prefrontal; between the semicircles on a line with their anterior end a single large flat scale. Supraorbital semicircles formed of large tubercular scales clearly differentiated from the slightly swollen scale of the supraorbital and frontal regions; semicircles separated by two partly by four rows of scales. Occipital region covered with scales slightly larger than the frontoparietals, the outer rows much larger than the others; two rows of scales between the occipital and the semicircles. Canthus rostralis consisting of a single large canthal scale and a short squarish precanthal, both swollen and slightly keeled; the canthal scale in contact with two elongate supra-ciliaries. Dorsal crest formed of low blunt spines, the largest about half a centimeter high; this crest broadly interrupted on the shoulders

and rump; 56 spines between these two points. Color above brownish green, tinged on the head, shoulders and along the mid line of the back with pale yellowish green.

Habitat:— Andros Island, Bahamas.

The most abundant species still existing in the Bahamas.

Description:— Adult male, M. C. Z., 6979, Andros Island, Bahamas, 1904, Harvard Bahama Expedition of 1904.

Rostral as wide as the mental, broadly in contact with the nasals, nasal large, ovoid, and perforated in the posterior half by a somewhat semicircular nostril; each nasal in contact with a rectangular supranasal and a slightly larger, triangular postnasal; nasals and supranasals broadly in contact in the middle of the snout; each supranasal in contact with a pair of narrow prefrontals which are followed by a very large posterior prefrontal; the anterior and posterior prefrontals form a median suture continuous with the nasal and supranasal suture; all of these scutes covering the upper surface of the snout strongly convex, even tubercular; between the prefrontals and the supraorbital semicircles several rows of large irregular scales; the row in contact with the prefrontals consisting of several very large scales, the largest being about a third as large as the posterior prefrontal; between the semicircles on a line with the anterior end a single large flat scale; the semicircles formed of large tubercular scales clearly differentiated from the slightly swollen scales of the supraorbital or frontal regions; supraorbitals roughly hexagonal and uniform in size; supraorbital semicircles separated by two, partly by four rows of scales, occipital located with its posterior end on a line with the posterior end of the semicircles; scales of the occipital region slightly larger than the frontals, the outer row of occipitals much larger than the others; two rows of scales between the occipital and the semicircles; two or three rows of superciliaries, a single large canthal scale and a short squarish precanthal on each side; canthal scale in contact with two elongate superciliaries, the whole series swollen and slightly keeled; a well-developed series of strongly keeled suboculars continued backward as a supratympanic series; eight supralabials to the middle of the eye, a series of three or four rows of small scales separating the supralabials from the suboculars; on the anterior edge of the ear three enlarged tubercular scales, preceded by a group of smaller ones, the larger one of which is located above the angle of the mouth near the ear; below the angle of the mouth a regular series of tubercular scales decreasing in size anteriorly; seven infralabials to the middle of the eye; a single row of very large, swollen malar scales; the two anterior ones in contact with the supralabials, the rest separated by a single

row of small scales; dorsal and ventral scales small, about eleven contained in the vertical diameter of the tympanum; from the nuchal fold along the median line of the neck and back, a row of very low blunt spines, the largest about half a centimeter high; this crest interrupted broadly on the shoulders and rump; fifty-six spines in the dorsal crest between these two points; upper surface of limbs with slightly imbricated, keeled, posteriorly pointed scales; scales covering the upper surface of the fore arm and tibia much longer than those covering the upper arm and femur; on the upper arm about seven, on the lower about six of these scales to the vertical diameter of the tympanum; a single series of twenty femoral pores, inner side of second toe with one comb, of third toe with two combs, each consisting of three lobes; tail compressed, covered with obliquely keeled scales in vertical rows, tail surmounted by a serrated crest, similar to the body crest but formed of larger spines.

Coloration: — Ground color brownish green washed on the head and arms along the mid region of the back and tail, as well as on the ventral surface with pale yellowish green; the pale yellowish green of the head somewhat suffused with blue, especially on the dorsal surface.

Material examined.

M.C.Z.	No. of specimens	Age	Sex	Locality	Date	Collector	Remarks
5960	1	adult	female				
6979	1	adult	male	Mangrove Cay, Andros Island	1904	Bahama Exp. 1904	
6947	1	adult	male	Mangrove Cay, Andros Island	1904	Bahama Exp. 1904	
6975	3	Head of adult male 2 young	both	Mangrove Cay, Andros Island	1904	Bahama Exp. 1904	De- scribed

Also four mounted specimens, two adult males, a female and young, Mangrove Cay, Andros Island, Bahama Exp. of 1904.

CYCLURA INORNATA, sp. nov.

Plate 14.

Type, an adult female, M. C. Z. 11062, U. Cay in Allen's Harbor, near Highborn Cay, Bahamas, March 2, 1915, C. J. Maynard.

Diagnosis. Nasals broadly in contact with the rostral. Prefrontal region covered by a pair of elongate supranasals, broadly in contact with the middle line of the snout, immediately followed by two pairs of prefrontals and a fifth scale which is intercalated at the crossing point of the sutures, the posterior pair several times as large as the anterior pair; both pairs of prefrontals broadly in contact in the middle line of the snout. Frontal region covered by a transverse row of four large scales in contact with the prefrontals and by two more large scales mesially arranged and separated from the transverse row by a single row of small scales. Supraorbital semicircles not apparent, but the scales of the supraocular region much smaller than those of the frontoparietal regions. Canthus rostralis consisting of a very elongate canthal scale preceded by a small precanthal; all these scales on the top of head very slightly swollen, some scarcely keeled. Dorsal crest consisting of very low blunt spines, the largest scarcely three millimeters high, this crest greatly diminished but not interrupted on the shoulders, widely interrupted, however, on the rump, sixty spines from shoulder to rump. Color above grayish brown sprinkled very slightly with yellowish gray; spinal region tinged with straw color; sides of the snout blackish; gular region chalky white in strong contrast to the rest of the ventral surface.

Habitat.—U. Cay in Allen's Harbor, Highborn Cay, Bahamas. Probably now extinct.

Description of Type.—Rostral as wide as the mental, broadly in contact with the nasals; nasal large, somewhat ovoid, perforated by a large ovoid nostril; each nasal in contact with an elongate supranasal and a triangular postnasal; nasals barely, supranasals broadly in contact in the middle line of the snout; supranasals immediately followed by two pairs of prefrontals and a fifth scale incalated at the crossing point of the sutures; the posterior pair several times as large as the anterior pair; both pairs of prefrontals broadly in contact in the middle line; no definite supraorbital semicircles; scales of the supraocular region much smaller than those of the frontal region; in contact with the prefrontals a transverse row of 4 large scales; separated from this row by a single row of small scales two more large scales mesially arranged, occipital located well forward and flanked on either side by a group of scales larger than those of the frontal region; frontal region covered by scales somewhat larger than those of the occipital region; two or three rows of superciliary shields not clearly differentiated; canthal scale very elongated, preceded by a small prefrontal, all these scales of the top of head very slightly swollen,

some scarcely keeled; a well-developed series of keeled suboculars continued backward as a supratympanic series, eight supralabials to the middle of the eye; a series of four or five rows of small scales separating the supralabials from the suboculars; on the anterior edge of the ear a single row of large, strongly tubercular scales preceded by a group of smaller, tubercular scales grading off in size anteriorly; below the angle of the mouth a group of large tubercular scales, in close contact with each other, grading off in size anteriorly; eight infralabials to the middle of the eye; a single row of large slightly swollen malar scales; a disconnected single row of small scales between some of the malars and infralabials; dorsal scales slightly larger than the ventrals, about twelve contained in the vertical diameter of the tympanum; from the nuchal fold along the median line of the neck and back a row of very low blunt spines, the largest scarcely three millimeters high; the crest greatly diminished but not interrupted, however, on the rump; 60 spines in the dorsal crest from shoulder to rump; upper surface of limbs with slightly imbricated, keeled posteriorly pointed scales, considerably larger than the body-scales; scales covering the upper surface of the fore arm and tibia much larger than those covering the upper arm and femur; on the upper arm about nine on the lower about seven of these scales to the vertical diameter of the tympanum; a single series of twenty-one femoral pores; inner side of the second toe with one comb of third with two combs, each consisting of three lobes. Tail compressed, covered with obliquely keeled scales in vertical rows, forming distinct verticils; tail surmounted by a serrated crest, similar to the body crest, but formed of slightly longer spines anteriorly.

Coloration. Ground tone of dorsal surface grayish brown, sprinkled very slightly with yellowish gray; the dorsal crest and spinal region tinged with straw color; upper surface of the head tinged with bluish; muzzle and sides of head brownish black, gular region chalky white in strong contrast to the rest of the ventral surface; whole ventral surface somewhat lighter than dorsal surface; limiting row of the verticils bluish gray.

Material examined.

We have only seen a single specimen of this species, the type.

CYCLURA RILEYI Stejneger.

Plate 7; Plate 15, fig. 3, 4.

Stejneger, Proc. Biol. soc. Wash., 1903, 16, p. 129.

Diagnosis.—Nasals broadly in contact with the rostral. Scales of the top of head flat or only slightly swollen. Prefrontal region covered by a pair of elongate supranasals in contact with the nasals and also in contact with each other, each supranasal followed by two large prefrontals, the posterior the larger, the prefrontals of each side in contact with each other but separated from the series of the opposite side by two rows of large scales. Top of head behind prefrontals covered with numerous small scales; the scales of the supraocular region much smaller than the others; except for a grouping of a few large scales on each side of the occipital, and a semirosette of enlarged scales in the frontoparietal region, these scales without a definite arrangement. Canthus rostralis consisting of a group of three scales, the canthal and precanthal about the same size and larger than the third scale. Dorsal crest interrupted on both shoulders and rump, formed of scales of varying height; nuchal section formed of about twenty spines about the same in width and varying from one to ten millimeters in height, according to the proximity to the extremities of the series, back section formed of seventy-six spines, scarcely over a millimeter in height, except for the last fourteen spines which average about 5 millimeters; caudal section formed of heavier spines than those of the back, about 4 millimeters in height. Limiting row of each verticle clearly differentiated. Ground color, bluish gray, heavily blotched with confluent tawny yellow spots except on the posterior ventral surface, which is uniform yellowish gray; head very much paler, tail darker than the rest of the body.

Habitat.—Two small cays in the large salt water lagoon on Watlings Island.

Description.—Adult male, M. C. Z. 10918, Watlings Island, Bahamas, April, 1915, W. W. Worthington.

Rostral as wide as the mental broadly in contact with the nasals; nasals very large, about the size of the posterior prefrontals, broadly hexagonal, in broad contact with each other; each nasal perforated posteriorly by an elongate nostril; each nasal in contact with an elongate supranasal and two postnasals; nasals and supranasals

broadly in contact in the middle line of the snout; immediately following the supranasals and separated by a double row of scales, two large smooth prefrontals on each side, the posterior pair the larger; these scales between the prefrontals as large as the scales covering the frontal region; top of head behind the prefrontal region covered by small, irregular polygonal shields, those on the supraocular region much smaller than the others; three poorly indicated rosettes of larger scales, one on the frontoparietal region and one on each side of the occipital, each rosette consisting of a somewhat rounded scale surrounded by a circle of subrectangular scales; all shields on the top of head smooth or very slightly swollen, occipital somewhat larger than the adjacent scutes; superciliary shields slightly larger than the supraorbitals; the first two and the last two scales of this series somewhat elongate, canthal scale preceded by a somewhat squarish precanthal of about the same size, a small subcanthal in contact with the canthal scale anteriorly; 2 loreal scales between precanthal and postnasal, squarish, not much smaller than precanthal; the rest of the loreal scales small and elongate, a series of strongly keeled suboculars not reaching the tympanum; temporal shields small; on the anterior edge of the tympanum just above the angle of the mouth a group of three or four large tubercular scales; below the angle of the mouth five regular rows of enlarged round scales, the series running obliquely forward; supralabials low, six to below the center of the eye. Lower labials larger than the supralabials, six to the center of the eye; two rows of large molar scales separated posteriorly from the infralabials by a single row of smaller scales; on each side of the jaws below the angle of the mouth five or six regular rows of rounded scales; dorsal crest interrupted on both shoulders and rump; nuchal section of the crest consisting of twenty spines all of about the same width, varying in height from one millimeter at the ends of the series to ten millimeters in the center; back section formed of seventy-six spines scarcely over a millimeter in height, the last fourteen spines, however, over five millimeters in height; caudal section formed of heavy spines about four millimeters in height; scales on the upper side of the arms larger than the dorsal scales, those on the fore arm a trifle larger than those on the upper arm; a single series of twenty-three femoral pores; inner side of second toe with one "comb," of third toe with two "combs" each consisting of three lobes; tail covered with faintly indicated verticils.

Coloration:—Ground color bluish gray, heavily blotched with confluent tawny yellow markings; upper and lateral surfaces of head very pale yellow; tail and hind limbs darker than the rest of the body.

Material Examined.

M.C.Z.	No. of speci- mens	Age	Sex	Locality	Date	Collector	Remarks
10918	1	adult	male	Watling's Island	1909	W. W. Worthington	Descrip.
9272	1	adult	male	Watling's Island	1903	J. H. Riley	Para- type

CYCLURA NUCHALIS, nov. sp.

Plate 8, fig. 1, 2.

Type, an adult, Acad. Nat. Sci. Phil. 11985, Fortune Island, Bahamas. Collection of Arthur Erwin Brown.

Since this species is in general similar to *C. rileyi* no detailed description is necessary, the differences being expressed in the following diagnosis.

Diagnosis:—Nasals broadly in contact with the rostral. Scales of the prefrontal and frontoparietal regions similar to those of *C. rileyi*; enlarged frontal scale proportionately larger, surrounding scales proportionally smaller than those of *C. rileyi*; supraorbital semicircles distinct posteriorly, formed of slightly tuberculate scales. Occipital scales more tuberculate than those of *C. rileyi*. Prefrontal scale more elongate than that of *C. rileyi*. Dorsal crest very different from that of any other *Cyclura*. This crest interrupted on the shoulders, widely interrupted on the rump; nuchal section formed of fourteen wide spines, the three central ones largest, about a centimeter high, the rest grading off in size toward the extremities; of these three central spines the most anterior one about half a centimeter wide at the base, in other words about twice as broad as any of the others; the crest running from shoulders to rump scarcely over a millimeter high, composed of sixty-two spines; caudal crest slightly higher than that of the back. Scales of the limiting row of each verticil only slightly larger than other scales of the verticil; about five scales in the bulge of each limiting row while *C. rileyi* averages four or less. The type of coloration similar to that of *C. rileyi* but the ground color brownish gray instead of blue-gray; general tonality of the head grayish brown instead of straw color.

Habitat:—Fortune Island, just to the south of Long Island, Bahamas.

Material examined.

The type only is known.

CYCLURA CARINATA Harlan.

Plate 8, fig. 3, 4; plate 13, fig. 3, 4.

Harlan, Journ. Acad. nat. sci. Phil., 1824, 4, p. 242, 250, pl. 15.
Barbour, Mem., M. C. Z., 1914, 44, p. 299.

Diagnosis:—Nasals broadly in contact with the rostral. Prefrontal region covered by a pair of irregular supranasals; nasals and supranasals of each side separated from each other by a single large scale. Frontal, frontoparietal, and occipital regions covered by uniformly small scales, irregular in shape and strongly keeled. Supraorbital semicircles not differentiated but the scales of the supraocular region smaller than the other supracephalic scutes. Two large, vertically arranged canthal scales on each side. Dorsal crest broadly interrupted on the shoulders and rump; the neck-crest half a centimeter high, the body-crest only three millimeters high; color above brownish gray, with numerous but faint reticulations; head tinged with blue, chest with smoky.

Habitat:—Turks Island, Southern Bahamas.

Description:—Adult male, M. C. Z. 1252 Turk's Island, Southern Bahama Islands, 1862, A. S. Bickmore.

Rostral as wide as the mental, broadly in contact with the nasals; nasals of medium size, somewhat pentagonal perforated posteriorly by a semicircular nostril; each nasal in contact with a large pentangular postnasal and a pair of irregular supranasals; nasals and supranasals of each side separated from each other by a single, large triangular scale, all the rest of the scales of top of head small and irregular, no enlarged prefrontal, frontal or parietal scales; a very slight indication of a supraocular disk; scales of the supraocular and supra-ciliary region as well as the outer parietal region somewhat smaller than the rest of the supracephalic scales; scales of the prefrontal, frontal, and occipital region irregular and all about the same size, while the scales of the supraocular and outer parietal regions are uniformly smaller; occipital rather large and located well forward; all scales of the top of head strongly keeled but hardly tubercular; two large, vertically arranged canthal scales on each side; a well-developed series of slightly keeled suboculars carried back a trifle beyond the orbit, ten supralabials to the middle of the eye; a series of three or four rows of small scales separating the supralabials from

the suboculars; no tubercular or swollen scales in the temporal region, only a few enlarged scales below the angle of the mouth, eleven infralabials to the middle of the eye; a double row of small slightly keeled malar scales separated from the infralabials by one or two rows of scales of the small size; dorsal and ventral scales small; from the nuchal fold along the median line of the neck and back a row of blunt spines; on the neck the spines about half a centimeter high; the crest broadly interrupted on the shoulders and rump; forty-seven spines in the dorsal crest between these two points, the first four and the last four spines of this series very much reduced, the largest spine about three millimeters high; upper surface of limbs with slightly imbricated, keeled, posteriorly pointed scales considerably larger than the body-scales; on the upper arm about twenty on the lower arm about twelve of these scales to the vertical diameter of the tympanum; twenty-three femoral pores; inner side of second toe with one comb, of third toe with two combs each consisting of three prominent and two small lobes; tail compressed, covered with obliquely keeled scales in vertical rows, forming distinct verticils; the limiting row of each verticil formed of strongly keeled scales; tail surmounted by a serrated crest, similar to the body-crest but formed of larger and sharper spines.

Coloration: — Ground tone of dorsal surface brownish gray; numerous but very faint yellow-brown reticulations extending from head to tail; these reticulations forming faint yellowish blotches on the head; tail uniformly yellowish gray; sides of head and gular region tinged with blue; chest smoky; rest of ventral surface the same color as tail.

Material examined.

The specimen described.

CYCLURA COLLEI Gray.

Plate 9; Plate 15, fig. 5, 6.

Gray, Cat. lizards British mus., 1845, p. 190. Barbour, Mem. M. C. Z., 1914, 44, p. 298.

Diagnosis: — Nasals separated from the rostral by several rows of fine granules. Prefrontal region covered by a series of three large shields on each side, each shield slightly swollen and convex; the

series separated by a double row of rather large irregular scales. Frontal and frontoparietal regions with small and irregular scales very slightly keeled, each scale depressed so as to make the interstices stand out like a network. Supraorbital semicircles differentiated only posteriorly where they are formed of broad, slightly keeled scales. Occipital region with a huge swelling on each side, each covered with flat scales. Canthus rostralis formed of a group of three, medium sized keeled scales. Dorsal crest not interrupted on either shoulder or rump; largest spine about a centimeter in length; fifty spines in the crest from shoulders to rump. Color above mud-gray washed with green anteriorly; a series of straw color stipplings covering the dorsal and lateral surfaces, these stipplings uniting into blotches posteriorly.

Habitat: — Jamaica, where it is now exceedingly rare, being only found on a few islets off the coast where the mongoose has not been introduced. The mongoose eats the eggs and the very young.

Description: — Adult male, M. C. Z. 9397 Goat Island, near Old Harbour, Jamaica, 1914, Arthur Perrin.

Rostral wider than mental, separated from the nasals by several rows of very fine granules; nasal large, ovoid and perforated on the posterior half by a large semicircular nostril; immediately behind and adjoining the nasal, a series of three large shields, slightly swollen and a trifle convex; the series separated by a double row of rather large irregular scales; the last pair of scales in the series about twice as large as the anterior pair; the scales of each series broadly in contact with each other without any intervening scales; a pair of large triangular postnasals; scales of the frontoparietal region all small and irregular, each scale depressed so that the interstices stand out like network; supraorbital semicircles only evident posteriorly, formed of broad, slightly keeled scales; scales covering the supraocular region smaller than those of the frontal region, each scale very slightly keeled; occipital smaller than nasals, located well forward between the semicircles from which it is separated by three rows of scales; occipital region swollen out into a pair of huge humps, each covered with a group of rather large, flat, slightly keeled scales; two rows of strongly keeled supraciliaries; canthus rostralis consisting of a group of three, medium sized keeled scales; a well-developed series of strongly keeled suboculars continued backward as a supratympanic series to above the middle of the ear; six supralabials to the middle of the eye; a series of very small scales separating the suboculars and the supralabials; above the angle of the mouth and in front of the

lower edge of the ear three large tubercular shields in a horizontal row; above them along the edge of the ear three or four rows of smaller scales, strongly tubercular and grading off in size anteriorly; below the angle of the mouth a few scattered enlarged scales, each surrounded by a circle of granules; seven lower labials to the center of the eye; a row of enlarged malar scales, the posterior ones strongly keeled and separated from the infralabials by a single row of fairly large scales of which the posterior ones are also keeled; dorsal and ventral scales small, about thirteen contained in the vertical diameter of the tympanum; from the nuchal fold along the median line of the neck and back a series of medium sized spines, not interrupted or greatly reduced on the shoulders, and only decreased in size on the rump; the longest spines about a centimeter in length; fifty spines in the crest from the shoulders to the rump; upper surface of the limbs with slightly imbricated, keeled, posteriorly pointed scales somewhat larger than the dorsals; on the lower arm about eleven, on the upper about fifteen of these scales to the vertical diameter of the tympanum; a single series of eighteen femoral pores; inner side of second toe with one comb, of the third toe with two combs, each consisting of three large and two small lobes; tail compressed, covered with obliquely keeled scales in vertical rows forming distinct verticils; tail surmounted by a row of spines slightly larger than, but continuous with, those of the body-crest.

Coloration: — Ground tone of dorsal surface brownish gray, almost a mud color; top of snout, sides of head washed with green; lower labials yellowish green; dorsal and lateral surfaces of the body faintly blotched with straw color, the blotches often breaking up into groups of small spots; upper surface of the thighs, sides of tail profusely blotched with the same color; ventral surface muddy gray; the legs tinged slightly with green.

Material examined.

The specimen described.

CYCLURA CORNUTA (Bonnaterre).

Plate 10.

Bonnaterre, Tabl. encyc. erpet., 1789, p. 40, pl. 4, f. 4. Stejneger, Rept. U. S. N. M. for 1902, 1904, p. 670, f. 122-126.

Diagnosis: — Nasals separated from the rostral by a single row of scales; nasals separated from each other by two rows of scales. Prefrontals in a double series of three large shields, strongly convex, the posterior pair particularly so, the two rows separated from each other by several rows of small scales, the posterior pair of prefrontals separated from the median frontal tubercle by a single row of very narrow scales. Supraorbital semicircles scarcely differentiated from the supraocular scales but somewhat larger than the frontoparietal scales. A single large canthal scale preceded by a small, hexagonal precanthal. Dorsal crest low, not over four millimeters high, reduced on the shoulders, nearly interrupted on the rump but not a distinct break in the whole. Verticils faintly indicated, the limiting row only a trifle larger than the row preceding it. Color very faded in the specimens examined, but probably uniform olive-gray in life, slightly more yellowish on the head and under surface.

Habitat: — Haiti.

Description: — Two specimens, a young one, and the head of a half grown individual M. C. Z. 3597, Jeremie, Haiti, 1859, D. F. Weinland.

Rostral wide, as wide as mental, separated from the nasals by a single row of scales; nasals large, ovoid, perforated by large nostrils posteriorly, separated from each other by two rows of scales; on each side of the top of the snout, immediately following and adjoining the nasals two rows of three large shields, strongly convex, the posterior pair tubercular, the rows separated from each other by two or three rows of small scales; of these two rows of large scales the posterior pair is nearly as long as the two others together; a large median frontal tubercle separated from this posterior pair of prefrontals by a single row of narrow scales; supraocular semicircles scarcely differentiated, but slightly larger than the supraorbital scales and distinctly larger than the frontoparietals; occipital located well forward between the semicircles from which it is separated by two or three rows of small scales, situated on a line between the posterior borders of the orbits; a single large canthal scale preceded by a small, hexagonal precanthal; a well-developed series of strongly keeled suboculars continued backward as a supratympanic series to above the ear; seven supralabials to below the middle of the eye; two or three rows of granules separating the suboculars from the supralabials; above the angle of the mouth and in front of the lower edge of the ear a large tubercular shield, above it about the middle of the edge of the ear another tubercle almost as large; nine lower labials to the center of the eye; a series of enlarged malar scales, the posterior

ones strongly keeled and separated from the lower labials by four rows of small scales; from the nuchal fold along the median line of the body a series of low spines which is much reduced between the shoulders, nearly interrupted on the rump; fifty spines on the back between these two points; upper surface of the limbs with slightly imbricated, keeled, posteriorly pointed scales, somewhat larger than the dorsals; on the lower arm about seven, on the tibia about five to the vertical diameter of the tympanum; a single series of about seventeen femoral pores; inner side of second toe with one "comb" of third toe with two combs each consisting of three main and two smaller lobes; tail covered with faintly indicated verticils; tail surmounted by a crest of heavy spines, a trifle larger than the back spine.

Coloration:—The color of both specimens is very faded, but it was probably uniform olive-gray in life, perhaps slightly more yellowish on the head and under surface.

Material examined.

The specimens described.

CYCLURA NIGERRIMA Cope.

Plate 11; Plate 15, fig. 1, 2.

Cope, Amer. nat., 1885, 19, p. 1006.

Diagnosis:—Very similar to *C. cornuta* from which it may be distinguished by the following characters:—

Nasals separated from the rostral by two rows of scales, one of the rows of very large scales. Nasals separated from each other by three, and in part by four rows of scales. Prefrontals separated from the large median frontal scales by two rows of scales. Supraorbital semi-circles not apparent but this may be due to the old age of the specimen. Precanthal scale as large or a trifle larger than canthal scale, both subrectangular or squarish. Dorsal crest low, interrupted on both shoulders and rump, forty-nine spines in the crest between these two points. Verticils similar to those of *C. cornuta* but very indistinct, the bulge not very prominent. Color indeterminable through fading, but probably not unlike that of *C. cornuta*.

Habitat:—Navassa Island.

Description.— The diagnosis given above is sufficient to characterize the species quite adequately. It is so similar to *C. cornuta* that no detailed remarks are necessary.

Material examined.

The diagnosis was taken from M. C. Z. 4717, Navassa Island, received from the Smithsonian Institution. Cope states (Proc. Amer. philos. soc., 1886, 23, p. 264) that his description of *nigerrima* was taken from a specimen partially skeletonized. He then proceeds to diagnose *C. onchiopsis*,—a synonymous form, also from Navassa Island and based upon three specimens in the U. S. N. M. We strongly suspect that our specimen is one of the types of *onchiopsis*. It was received in Cambridge before the appearance of Cope's paper, but it is known that Cope often drew up notes and descriptions of species and frequently subjected them to long delays before they actually appeared in print. Our specimen agrees remarkably with Cope's description and Dr. Stejneger writes me that he has not found the specimens which Cope refers to in the National Museum.

There is also a fine mounted adult male in the M. C. Z. said to come from Navassa Island and representing this species. It was presented by the N. Y. Zoölogical Society.

CYCLURA STEJNEGERI, nov. sp.

Plate 12.

Type, a young specimen U. S. National Museum 29367; Mona Island, August, 1901, B. S. Bowditch. Paratype M. C. Z. 11145, formerly U. S. N. M. 29365, an adult male having the same data.

Diagnosis.— Very similar to *C. cornuta* from which it may be distinguished by the following characters:—

Nasals in contact with the rostral; two, and in part three rows of scales between the nasals. Prefrontals separated from the enlarged median frontal scale by two rows of scales. A single large, elongate canthal scale preceded by three small precanthals. Dorsal crest much reduced between the shoulders, absolutely interrupted on the rump, fifty-one scales in the crest from shoulder to rump. Limiting row of each verticil not much wider than the other rows of the verticils. Color somewhat faded, uniform dark olive-green.

Habitat.— Mona Island.

Remarks:—No further discussion of this species is necessary in view of its similarity to *C. cornuta*. It may be added, however, that Stejneger when writing his Herpetology of Porto Rico, suspected the distinction between this species. He had, however, no Haitian material for comparison and was further deterred by some notes which Günther (Trans. Zool. soc. Lond., 1882, 11, p. 218, pl. 44) published regarding a specimen with no locality which died in the London Zoo and to Stejneger it seemed unlikely that a specimen from Mona would find its way alive to London. We believe that this specimen really came from Mona Island, a possibility by no means so remote as Stejneger seemed to think, especially when the rarity of the species in Haiti is taken into account. It is not unlikely that the small Haitian sailing vessels may even visit Mona purposely, to take Iguanas for food. It is also not improbable that such individuals may be carried alive to Haiti and thence one may have found its way to London. (Cf. Stejneger's discussion of this specimen, Ann. rept. U. S. N. M. for 1902, 1904, p. 671).

Material examined.

We have only seen Bowdish's specimens listed by Stejneger (*loc. cit.*). One of these is now in the M. C. Z., 11145, a paratype, figured.